

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Docket Number (Optional)

MAT-8725US

Application Number

10/552,396

Filed

October 7, 2005

First Named Inventor

Koji Akiyama et al.

Art Unit

2889

Examiner

Britt D. Hanley

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).

Note: No more than five (5) pages may be provided.

I am the

☐ applicant/inventor.

☐ assignee of record of the entire interest.
See 37 CFR 3.7.1 Statement under 37 CFR 3.73(b) is enclosed.
(Form PTO/SB/96)

☒ attorney or agent of record.
Registration number **41,738**

☐ attorney or agent acting under 37 CFR 1.34.
Registration number if acting under 37 CFR 1.34 _____


Signature

Jacques L. Etkowicz

Typed or printed name

610-407-0700

Telephone number

September 22, 2010

Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

☐ *Total of _____ forms are submitted

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Reasons Review is Requested

Applicants' invention relates to an aging method for performing an aging of a plasma display panel and an aging device of a plasma display panel. Applicants' claims include features neither disclosed nor suggested by the cited art. Namely, the cited art does not disclose or suggest positioning air blowing means above a front-face surface of a plasma display panel to direct air to the front-face surface in a direction away from parallel relative to the front-face surface, where at least a portion of the air blowing means is disposed within an area defined by the perimeter of the plasma display panel.

Claims 1-16 are pending. Reconsideration of claims 1-16 is respectfully requested in view of the following remarks.

Claims 1-16 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Shinji et al. (JP 11-213891) in view of Oono (JP 3-75596) and Kazuya et al. (JP 07-162180). Applicants respectfully traverse this rejection for the reasons set forth below.

Applicant's invention, as recited by claim 1, includes features which are not disclosed, taught or suggested by the cited art, namely:

... positioning the air blowing means above a front-face surface of the plasma display panel to direct air to the front-face surface in a direction away from parallel relative to the front-face surface ...

... at least a portion of the air blowing means is disposed within an area defined by the perimeter of the plasma display panel. (Emphasis Added)

Shinji et al. disclose, in Fig. 2, an aging room 2 for aging panels that is applied to tray 11 (paragraph [0015] of the machine translation). At paragraph [0023], Shinji et al. disclose including a fan in aging room 2 for cooling aging room 2 during the aging period. At paragraph [0028] (of the machine translation), Shinji et al. disclose that tray 11 is equipped with a fan for cooling.

As acknowledged by the Examiner on page 3, paragraph 5 of the Office Action, Shinji et al. do not disclose or suggest: 1) changing at least one of the direction or amount of air blown from the air blowing means during the aging process, 2) positioning the air blowing means above a front-face surface of the plasma display panel to direct air to the front-face surface in a direction away from parallel relative to the front-face surface and 3) that at least a portion of

the air blowing means is disposed within an area defined by the perimeter of the plasma display panel, as required by claim 1. Accordingly, Shinji et al. do not include all of the features of claim 1.

Oono discloses, in Figs. 1 and 2, a cooling structure of a circuit board including fan 6 positioned below the edge of circuit board 3 and air flow guide 2 for "variably controlling" the blown density of air provided to circuit board 3 (Claims and Description of Numerals and Signs of Main Parts).

Oono, however, does not disclose or suggest positioning the air blowing means above a front-face surface of the plasma display panel to direct air to the front-face surface in a direction away from parallel relative to the front-face surface, where at least a portion of the air blowing means is disposed within an area defined by the perimeter of the plasma display panel, as required by claim 1 (emphasis added). Instead, Oono discloses that fan 6 is positioned below circuit board 3 and air flow guide 2, for redirecting the blown density of air provided to circuit board 3 (Figs. 1 and 2). Because fan 6 is positioned below circuit board 3, the air is directed parallel to the surface of the circuit board (i.e., to. an edge of circuit board 3, not to a front-face surface). Accordingly, Oono cannot teach that a portion of the air blowing means is disposed within an area defined by the perimeter of the plasma display panel, as required by claim 1.

On page 3, paragraph 6 of the Office Action, it is asserted that "Oono discloses a fan (6) and an airflow guide (2) that changes the direction of the air to cool a circuit board." Applicants respectfully disagree. Oono does not disclose or suggest changing, during the aging, at least one of the direction or amount of air blown from the air blowing means with time, as required by claim 1. There is no suggestion in Oono that air flow guide 2 rotates over time. Instead, Oono discloses that the direction of the air flow guide 2 is fixed, as shown in Figs. 3 and 4. The skilled person would understand that, because air flow guide 2 is stationary, air flow guide 2 directs air away from a same component over time (see Fig. 2). In other words, the phrase "variably controlling," recited in Oono, does not refer to changing the direction of air flow over time, as required by claim 1. Thus, Oono does not make up for the deficiencies of Shinji et al. with respect to claim 1.

Kazuya et al. disclose, in Figs. 1-3, a cooling structure for uniformly cooling a plurality of printed boards 15 that are stored in parallel with each other in bin 11. The cooling structure

includes fan device 50 mounted below the edges of printed boards 15. Fan device 50 includes a plurality of fan units 5 and a shaft 31 for pivoting fan device 50. (Abstract and [0033] of a machine translation).

Kazuya et al., however, do not disclose or suggest positioning the air blowing means above a front-face surface of a plasma display panel to direct air to the front-face surface in a direction away from parallel relative to the front-face surface, where at least a portion of the air blowing means is disposed within an area defined by the perimeter of the plasma display panel, as required by claim 1 (emphasis added). Instead, Kazuya et al. teach that fan device 50 directs air parallel to the surface of printed boards 15. Even though fan device 50 pivots, air is still directed from below boards 15, toward an edge of each board (Drawing 2), not to a front-face surface. Accordingly, Kazuya et al. cannot teach that a portion of the air blowing means is disposed within an area defined by the perimeter of the plasma display panel, as required by claim 1. Thus, Kazuya et al. do not make up for the deficiencies of Shinji et al. and Oono with respect to claim 1.

On page 3, paragraph 7 of the Office Action, the Examiner asserts "it would have been obvious to a person having ordinary skill in the art having Shinji et al., Oono and Kazuya et al. to modify the device of Shinji et al. to include the airflow guide of Oono in order to better cool the panel so as to prevent cracks from forming in the panel and to include fans capable of blowing air toward the PDP in directions other than parallel to the surface of the PDF in order to uniformly cool the PDP," based on paragraph [0025] of Kazuya et al. Applicants respectfully disagree. As discussed above, Oono discloses a fixed airflow guide which directs air away from a component. Thus, Oono teaches away from uniformly cooling a circuit board. Furthermore, paragraph [0025] of Kazuya et al. teaches that the specific position of the circuit boards right above the fan (so that air is directed parallel to the surface of printed boards 15) allows for all of the printed circuit boards to be cooled almost uniformly. Thus, both Oono and Kazuya et al. require the fan to be positioned below one or more boards, to direct air toward an edge of each board, not to a front-face surface. Accordingly, the skilled person would not combine Shinji et al, with Oono and Kazuya et al. to produce Applicants' claimed invention. In fact, the only teaching of air blowing means above a front-face surface of the plasma display panel, where the air blowing means is changed in at least one of the direction or the amount of air blown during the aging process, comes from Applicants' own disclosure. Accordingly, the Examiner is using "hindsight" in order to reject Applicants' claims. A rejection based on hindsight, however, is

impermissible. (See MPEP § 2142.) For the reasons set forth above, allowance of claim 1 is respectfully requested.

Claim 6, although not identical to claim 1, includes features similar to claim 1 which are neither disclosed nor suggested by the cited art. Accordingly, allowance of claim 6 is respectfully requested for at least the same reasons as claim 1.

Claims 2-5 and 7-14 include all of the features of respective claims 1 and 6 from which they depend. Accordingly, claims 2-5 and 7-14 are also patentable over the cited art for at least the reasons set forth above.

Claims 15 and 16, although not identical to claim 1, include features similar to claim 1 which are neither disclosed nor suggested by the cited art. Namely, that a vector normal to the front-face surface of the plasma display panel intersects the air blowing means. As acknowledged by the Examiner on Page 3, paragraph 5 of the Office Action, Shinji et al. are silent regarding this feature. The remaining cited art are discussed above and do not make up for the deficiencies of Shinji et al. with respect to claims 15 and 16. Accordingly, allowance of claims 15 and 16 is respectfully requested.

Applicants note that, in their response of March 22, 2010 to the previous Office Action, claims 1 and 6 were amended and claims 15 and 16 were added, based on a discussion by Applicants' representatives with Examiner Hanley and Supervisor Ton during the telephone interview of January 25, 2010.

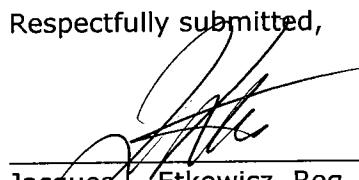
On page 6, paragraph 16 of the Office Action, the Examiner agrees that the indicated features of claims 1, 6, 15 and 16 are not taught by the cited art. However, the Examiner argues that these indicated features are an engineering design choice and that the "amount of air flow required, the direction of air flow, and the position of the air blowing means is routine optimization." (See page 6, paragraph 16 of the Office Action. See also page 4, paragraphs 8 and 9 of the Office Action.)

Applicants respectfully disagree. As discussed above Shinji et al. are completely silent regarding a position of a fan relative to a plasma display panel, and that the fan is changed in at least one of the direction or the amount of air blown during the aging process, as required by Applicants' claimed invention. Both Oono and Kazuya et al. require the fan (fan device) to be positioned below one or more boards, to direct air toward an edge of each board, not to a front-

face surface. Applicants respectfully note that the "mere fact that a worker in the art could rearrange the parts of the reference device to meet the terms of the claims on appeal is not by itself sufficient to support a finding of obviousness. The prior art must provide a motivation or reason for the worker in the art, without the benefit of appellant's specification, to make the necessary changes in the reference device." (See MPEP §2144.04 (VI.C).) Applicants point out that the only teaching of an air blowing means positioned above a front-face surface of the plasma display panel to direct air to the front-face surface in a direction away from parallel, where the air blowing means is changed in at least one of the direction or the amount of air blown during the aging process, comes from Applicants' own disclosure. Accordingly, the Examiner is using "hindsight" in order to reject Applicants' claims. A rejection based on hindsight, however, is impermissible.

In view of the arguments set forth above, Applicants respectfully assert that the above-identified application is in condition for allowance, which action is respectfully requested.

Respectfully submitted,



Jacques L. Etkowicz, Reg. No. 41,738
Attorney for Applicants

DMG/sh

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P.O. Box 980
Valley Forge, PA 19482
(610) 407-0700

974243